

202 CMR 2.00: MASSACHUSETTS STANDARDS

Section

- 2.06: Advertising and Sale of Motor Fuel and Lubricating Oil at Retail
- 2.10: Minimum Standards of Strength and Quality for Anti-freeze
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2.06: Advertising and Sale of Motor Fuel and Lubricating Oil at Retail

(1) The Display of Price Advertising Signs. Each pump or other dispensing device, including computing pumps, from which motor fuel is sold at retail shall have attached or affixed atop the dispenser at least one sign and not more than two signs of weatherproof material in a plain and conspicuous position showing the price per gallon of motor fuel sold there-from. Each face of said sign shall be deemed one sign. In addition, if a discount is offered for cash sales the words "cash" shall be included in the applicable portion of the sign and directly above the "cash" price. When "cash" sales and other types of sales are made from the same dispenser both prices shall be posted in a dual price sign and labeled directly above that price with the type of sale the price refers. i.e. "cash", "credit", "credit/debit" or the condition of sale required for the non-cash price posted in print no smaller than two inches in height.

The price(s) shown shall be the unit price per gallon, which price(s) shall include all taxes imposed, both federal and state. Beneath said unit price there shall appear either of the following statements: "All taxes included"; "Including tax"; or "tax inc". All letters appearing on the sign(s) regarding this statement shall be at least ¼ inch high.

Each and all of the letters, figures or numerals of such sign shall be plainly legible, shall be of the same type and design, and shall be black lettering and figures imposed on a white background or white lettering and figures imposed on a black background.

All figures or numerals on each sign shall be at least four inches high and all lines or marks used in the making of such figures or numerals shall be at least 1/8 inch in width and the over-all height of any figure or numeral, except the figure one, shall not be greater than three times the over-all width of such figure or numeral. Minimum size of the sign including the frame must be no less than eight inches in height and ten inches in length.

If a fraction of a cent is a part of the price per gallon and it is expressed as a common fraction with numerator and denominator, the total height of such fraction shall be equal to that of a whole number used on such sign, and the numerator and denominator shall be of equal sizes in relation to each other. If dollar and decimal places are used to indicate the price per gallon all numerals shall be of the same size.

Said sign or signs shall be placed in a plain and conspicuous position so as to be easily visible from any position a customer may reasonably be expected to assume. If service of motor fuel may be made from more than one side of such dispensing device, signs shall be placed so as to be visible from at least two sides of such device.

(2) The Display of Price Advertising Signs Applicable to Multi Grade Dispensers and Blending

Dispensers Only. In addition to the foregoing, the following shall apply to multi grade and blending dispensers only.

Each multi grade and blending dispenser shall display individual unit price designations for all grades, blends or mixtures sold through the delivery outlet, which shall be placed in line with the unit price pump indications and the pump grade dispenser selectors on the dispenser(s). In addition, price signs displayed on multi grade and blend dispensers dispensing more than three grades or blends shall plainly and conspicuously identify the grade, blend or mixture in letters a minimum of two inches in height. Further, the grade(s) of fuel advertised and posted on the dispenser(s) for the lowest and highest octane fuel shall be the grade of fuel for the lowest octane and highest octane fuels being dispensed as indicated on the wholesale delivery invoice.

(3) Street Signs and Non Dispenser Display Advertising of Prices. Any sign other than those required to be posted on the dispenser(s) referring to the price of fuel shall be the total price including all taxes, shall state the grade to which the price refers and if a condition of sale is required to receive the price advertised, then the condition of sale must be clearly stated on the sign in close proximity to the price in print size no smaller than 1/3<sup>rd</sup> the size of the advertised price. If the same grade of fuel is advertised at more than one price than the same name for that grade of fuel and no other must be used. If the word unleaded is used in the advertisement the grade of fuel to which the price refers must also be stated in the advertisement next to the word unleaded.

(4) Records to be Kept. A Sales Record which shall show the total quantity of each grade of motor fuel and lubricating oil sold each day. Supporting records of meter readings must be kept for each dispenser.

A Purchase Record shall show the total quantity of each grade of motor fuel and the total quantity of lubricating oil purchased. Documentary evidence must be kept, such as invoices, delivery tickets, or monthly statements on the purchases of motor fuel and of lubricating oil.

(5) Marking by Brands. All above-ground equipment for storing or dispensing motor fuel or lubricating oil operated by a retail dealer shall bear in a conspicuous place the brand name or trade mark of the product stored therein or sold or dispensed therefrom. If such motor fuel or lubricating oil has no brand name or trade mark, the container or dispensing equipment must be plainly and conspicuously marked with the words "No Brand."

When lubricating oil is dispensed from glass bottles or jars contained in a rack or carrier, it will be sufficient to mark such carrier or rack plainly or conspicuously with the brand name or trade mark of the manufacturer of the product. If there is no brand name or trade mark, such carrier or rack shall be plainly and conspicuously marked "No Brand."

No glass bottles or jars, other than as indicated by the markings on the carrier or rack, shall be commingled with or placed in such carriers or racks.

When lubricating oil is dispensed from hand measures, such measures need not be marked, provided they are filled in the presence of the customer from a container or dispenser which is marked as hereinbefore required.

The above marking shall be readily visible to and readable from any position a customer may

reasonably be expected to assume.

Delivery fill boxes of motor fuel tanks shall be plainly marked as to the grade of motor fuel contained therein.

(6) Display of Alcohol Content Signs. The main display panels of each pump or other dispensing device, including computing pumps, from which motor fuel, blended or mixed with more than one percent alcohol is sold at retail, shall have affixed thereon, one sign made of waterproof material showing the ethanol, methanol and cosolvent content of the motor fuel. Such sign shall look like the illustration appearing at the end of 202 CMR 2.06.

Such signs shall be as follows:

- (a) Layout. The signs shall be five inches wide by six inches long with a \_ black border.
- (b) Type Size. Block letters and numerals shall be used on the signs. The words "ALCOHOL CONTENT" shall be in letters ½" high and 1/8" wide. All other letters and numerals shall be at least ¼" high and 1/8" wide.
- (c) Colors. Such signs shall be in black print on a yellow background. Both colors shall be non-fade.

For the purpose of 202 CMR 2.06(5):

Co-Solvent means an alcohol or any other chemical with higher molecular weight than ethanol or methanol which is blended or mixed with either or both to prevent phase separation in gasoline.

Ethanol means ethyl alcohol, a flammable liquid having the formula  $C_2H_5CH_3$ , blended or mixed with gasoline for use in motor vehicles and commonly or commercially sold as ethanol or ethyl alcohol.

Methanol means methyl alcohol, a flammable liquid having the formula  $CH_3OH$ , blended or mixed with gasoline for use in motor vehicles and commonly or commercially known or sold as methanol or methyl alcohol.

ALCOHOL CONTENT	
MAX. % BY VOLUME	
ETHANOL	_____ %
METHANOL	_____ %
ALCOHOL COSOLVENT	_____ %

(7) Biodiesel/Biomass and Biodiesel/Biomass Blends Pump labeling Requirements

(a) Biodiesel means the monoalkyl esters of long chain fatty acids derived from plant or animal matter that meet: (1) the registration requirements for fuels and additives under 40 CFR part 79; and (2) the requirements of the American Society for Testing and Materials standard D6751 "Standard Specification for Biodiesel Blend Stock (B100 for Middle Distillate Fuels).

(b) Biomass-based diesel fuel means a diesel fuel substitute produced from nonpetroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency

under 42 U.S.C. 7545, and includes fuel derived from animal wastes, including poultry fats and poultry wastes, and other waste materials, or from municipal solid waste and sludges and oils derived from wastewater and the treatment of wastewater but not biodiesel as defined in part (a).

(c) Biodiesel blend means a blend of petroleum-based diesel fuel with biodiesel.

(d) Biomass-based diesel blend means a blend of petroleum-based diesel fuel with biomass-based diesel.

( 8 ) Labels.

All labels must meet the following specifications:

(a) *For biodiesel blends containing more than 5 percent and no greater than 20 percent biodiesel by volume.* The label is 3 inches (7.62 cm) wide  $\times$  2½ inches (6.35 cm) long. “Helvetica black” type is used throughout. All type is centered. The band at the top of the label contains either:

(b) the capital letter “B” followed immediately by the numerical value representing the volume percentage of biodiesel in the fuel (*e. g.*, “B-20”) and then by the term “Biodiesel Blend”; or

(c) the term “Biodiesel Blend.”

The band should measure 1 inch (2.54 cm) deep. Spacing of the text in the band is 1/4 inch (.64cm) from the top of the label and 3/16 inch (.48 cm) from the bottom of the black band, centered horizontally within the black band. Directly underneath the black band, the label shall read “contains biomass-based diesel or biodiesel in quantities between 5 percent and 20 percent.” The script underneath the black band must be centered horizontally, with 1/8 inch (.32 cm) between each line. The bottom line of type is 1/4 inch (.64 cm) from the bottom of the label. All type should fall no closer than 3/16 inch (.48 cm) from the side edges of the label.

(9) *For biomass-based diesel blends containing more than 5 percent and no greater than 20 percent biomass-based diesel by volume.* The label is 3 inches (7.62 cm) wide  $\times$  2½ inches (6.35 cm) long. “Helvetica black” type is used throughout. All type is centered. The band at the top of the label contains either:

(10) *For biodiesel blends containing more than 20 percent biodiesel by volume.* The requirements are the same as in Section (8) (a), except that the black band at the top of the label shall contain the capital letter “B” followed immediately by the numerical value representing the volume percentage of biodiesel in the fuel (*e.g.*, “B-70”) and then the term “Biodiesel Blend.” In addition, the words directly underneath the black band shall read “contains more than 20 percent biomass-based diesel or biodiesel.”

(11) *For biomass-based diesel blends containing more than 20 percent biomass-based diesel by volume.* The requirements are the same as in Section (9) (a), except that the black band at the top of the label shall contain the numerical value representing the volume percentage of biomass-based diesel in the fuel followed immediately by the percentage symbol (*e.g.*, “70%”) and then the

term “Biomass-Based Diesel Blend.” In addition, the words directly underneath the black band shall read “contains more than 20 percent biomass-based diesel or biodiesel.”

(12) *For 100% biodiesel.* The requirements are the same as in Section (8) (a), except that the black band at the top of the label shall contain the phrase “B-100 Biodiesel.” In addition, the words directly underneath the black band shall read “contains 100 percent biodiesel.”

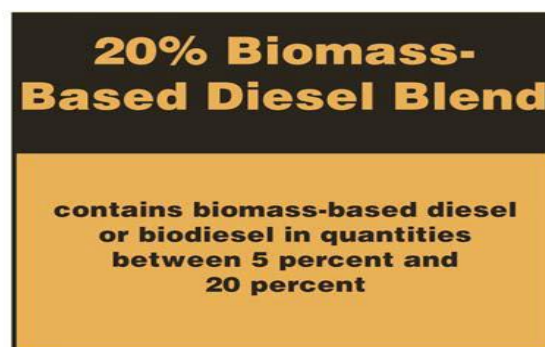
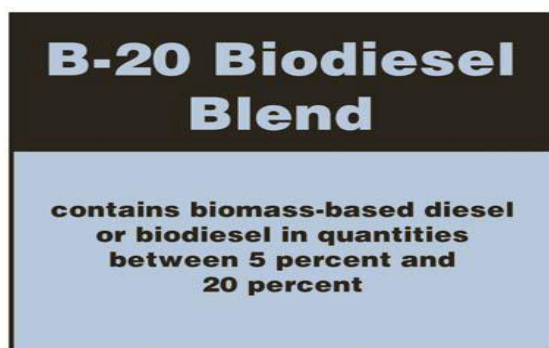
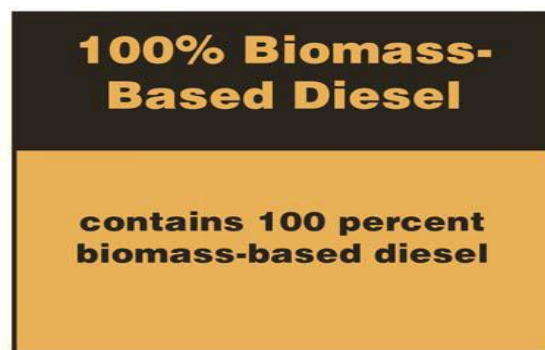
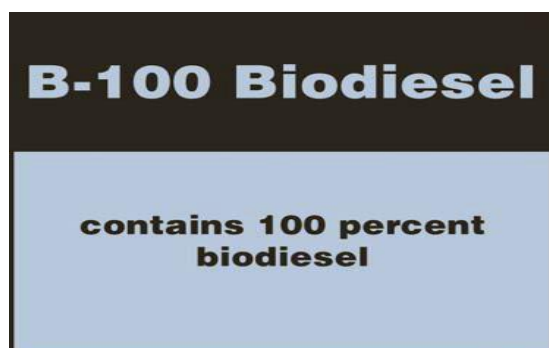
(13) *For 100% biomass-based diesel.* The requirements are the same as in Section (9) (a), except that the black band at the top of the label shall contain the phrase “100% Biomass-Based Diesel.” In addition, the words directly underneath the black band shall read “contains 100 percent biomass-based diesel.”

(14) Labels.

(a) The background color on all the labels for biomass and biomass diesel blends is Orange: PMS 1495 or its equivalent. The knock-out type within the black band is Orange: PMS 1495 or its equivalent. All other type is process black. All borders are process black. All colors must be non-fade.

(b) *For biodiesel and biodiesel blends.* The background color on all the labels is Blue: PMS 277 or its equivalent. The knock-out type within the black band is Blue: PMS 277 or its equivalent. All other type is process black. All borders are process black. All colors must be non-fade.

(15) Labels Graphics for biodiesel, biomass and biodiesel and biomass diesel blends as follows:



## SUMMARY OF LABELING REQUIREMENTS FOR BIODIESEL FUELS

**APP. A - SUMMARY OF LABELING REQUIREMENTS FOR BIODIESEL FUELS**

Fuel type	Blends of 5 percent or less	Blends of more than 5 but not more than 20 percent			Blends of more than 20 percent			Pure (100%) Biodiesel or Biomass-Based diesel		
		Header	Text	Color	Header	Text	Color	Header	Text	Color
<b>Biodiesel</b>	No label required	Either "B-XX Biodiesel Blend" or "Biodiesel Blend"	contains biomass-based diesel or biodiesel in quantities between 5 percent and 20 percent	Blue	B-XX Biodiesel Blend	contains more than 20 percent biomass-based diesel or biodiesel	Blue	B-100 Biodiesel	contains 100 percent biodiesel	Blue
<b>Biomass-Based Diesel</b>	No label required	Either "XX% Biomass-Based Diesel Blend" or "Biomass-Based Diesel Blend"	contains biomass-based diesel or biodiesel in quantities between 5 percent and 20 percent	Orange	XX% Biomass-Based Diesel Blend	contains more than 20 percent biomass-based diesel or biodiesel	Orange	100% Biomass-Based Diesel	contains 100 percent biomass-based diesel	Orange

- (16) Standard Method of Test. As authorized by M.G.L. c. 94, §§ 295I and 295G, the standard method of test for distillation of gasoline for the purpose of determining end point is prescribed as the current "Standard Method of Test for Distillation of Petroleum Products" as published by the American Society for Testing and Materials (ASTM) and designated as D-86. The test conditions prescribed in Group 1 (Table 1) of D-86 shall be used regardless of "Sample Characteristics" which may place limitations on vapor pressure and/or end point. As authorized by M.G.L. c. 94, §§ 295I and 295G, the standards for viscosity classification for automotive lubricating oil shall be those of the current recommendations of the Society of Automotive engineers (SAE) entitled "Crankcase Oil Viscosity Classification". The necessary viscosity determinations shall be made by the current ASTM standard methods which are designated in the above mentioned SAE Crankcase Oil Viscosity Classification.

2.10: Minimum Standards of Strength and Quality for Anti-freeze

- (1) Sampling and preparation of anti-freeze shall be in accordance with ASTM Method: D1176.
- (2) Maximum Freezing point of anti-freeze solution having Methanol Base shall be -46°F., 50% by volume in distilled water mixture. (ASTM Method: D1177).
- (3) Maximum freezing point of anti-freeze solution having an Ethylene Glycol Base shall be -34°F. with 50% by volume in distilled water mixture. (ASTM Method: D1177).
- (4) The minimum equilibrium boiling point for anti-freeze having a Methanol Base shall be 148.5°F. (ASTM Method: D1120).
- (5) The minimum equilibrium boiling point for anti-freeze having an Ethylene Glycol Base

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shall be 300°F. (ASTM Method: D1120).

(6) Specific gravity, 60/60F for anti-freeze having Methanol Base shall be minimum 0.790, maximum 0.815. (ASTM Method: D1122).

(7) Specific gravity, 60/60F for anti-freeze having Ethylene Glycol Base shall be minimum 1.114, maximum 1.150. (ASTM Method: D1122).

(8) The maximum ash content by weight for anti-freeze having Methanol Base shall be 3.5%. (ASTM Method: D1119).

(9) The maximum ash content by weight for anti-freeze having an Ethylene Glycol Base shall be 5.0%. (ASTM Method: D1119).

(10) The maximum water content by weight for anti-freeze Methanol and Ethylene Glycol Base shall be 5.0%. (ASTM Method: D1123).

(11) Corrosion, 33\_% by volume in water for copper, brass, steel, and cast iron 10 mg. and for solder and aluminum 20 mg. maximum loss per specimen. (ASTM Method: D1384).

(12) Foaming, 33\_% by volume in water; height of foam, 150 ml. maximum; and break time, five seconds maximum. (ASTM Method: D1881).

### 2.11: Standards for the Various Grades of Heating Oils Requiring Manufacturers or Distributors to Furnish Samples of the Same, and Providing for the Entry and Inspection of the Premises of Such Manufacturers or Distributors, and the Inspection of Heating Oils Stored Thereon

(1) Scope. These specifications cover grades of heating oil intended for use in various types of fuel burning equipment under various operating conditions.

(2) General Requirements.

(a) The grades of heating oil specified herein shall be homogeneous hydrocarbon oils, free from inorganic acid, and free from excessive amounts of solid or fibrous foreign matter likely to make frequent cleaning of strainers necessary.

(b) Grades containing residual oil shall remain homogeneous in normal storage and not separate into light and heavy components.

(3) Detailed Requirements.

(a) The various grades of heating oil shall conform to the requirements shown in 202 CMR 2.11: *Table 1*.

(b) The statutory regulations of health or environmental agencies will supersede those outlined in 202 CMR 2.11: *Table 1* when they are more stringent than as outlined. Higher sulfur may be permitted in accordance with Massachusetts Department of Environmental Protection regulations which provide for exceptions where approved equipment results in lowering the air polluting effect.

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## (4) Methods of Test.

(a) The detailed requirements enumerated in the minimum standards shall be determined in accordance with the following American Society for Testing and Materials Methods:

1. Flash Point: Pensky-Martens Closed Tester (ASTM D-93)
  2. Pour Point: ASTM D-97
  3. Water and Sediment:
    - Grades 1, 2, 4 and 5: ASTM D-1796
    - Grade 6: ASTM D-95 and ASTM D-473
  4. Ash: ASTM D-482
  5. Distillation: ASTM D-86
  6. Viscosity:
    - Grades 1 and 2 (Kinematic): ASTM D-445
    - Grades 4, 5 and 6 (Saybolt): ASTM D-88
  7. Gravity: Hydrometer Method - ASTM D-287
  8. Corrosion: Copper Strip, ASTM D-130, 3 hours @ 122F.
  9. Sulfur: Any grade may be determined by the following:
    - Bomb Method - ASTM D-129
    - Quartz-Tube Method - ASTM D-1551
    - High Temperature Method - ASTM D-1552
    - X-Ray Spectrograph Method - ASTM D-2622
- In addition, sulfur in Grade 1 may be determined by the Lamp Method - ASTM D-1266

(b) Every manufacturer or distributor of heating oils shall submit samples of said products when requested by the Director of Standards.

(c) The Director of Standards, or his authorized agent, may enter each place where heating oils are stored or kept for sale and any vehicle used for its conveyance and may inspect said oil or take therefrom samples for analysis. The Director shall cause each sample taken to be analyzed or otherwise satisfactorily tested and shall record and preserve as evidence the results thereof.

Table 1

## MINIMUM STANDARDS FOR HEATING OILS

Grade	Flash Point	Pour Point	Water & Sed.	Ash	Distillation		
	°F	°F	°F	% by wt.	10%	90%	
	Min	Max	Max	Max	Max	Min	Max
1	100	0	trace		420		550
2	115	20	.05			540	640
4	130	20	.50	.10			
5	130		1.00	.10			
6	150		2.00				



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Grade	Saybolt Viscosity, sec.				Kinematic Viscosity @ 100°F		Gravity deg. API	Copper Strip Corrosion	Sulfur %
	Universal @ 100°F		Furol @ 122°F						
	Min	Max	Min	Max	Min	Max	Min	Max	Max
1					1.4	2.2	35	No. 3	.5
2					2.0	3.6	30		.5
4	45 (light)	125 (light)							2.5
5	150 (heavy)	300 (heavy)							2.5
6	350	750		300					2.5

REGULATORY AUTHORITY

202 CMR 2.00: M.G.L. c. 94, §§ 9, 239A, 249H, 295I, 303H and c. 98, §§ 13, 28A, 28H, 29 and 46A.

(PAGES 11 THROUGH 20 ARE RESERVED FOR FUTURE USE.